

and a packet success rate value. The selection criteria can advantageously be time dependent.

Figure 3

INTHE DRAWINGS

Enclosed is a set of replacement sheets of Figures 1-3 and a set of markups to show the changes made.

IN THE CLAIMS

- 1 1. [cancelled] -A method for selection of a route for transmission of data
- 2 packets from a source network site to a destination network site, both network sites
- 3 being connected to a network via a plurality of network service provider connections,
- 4 said method comprising at least steps of:-
- 6 -----selecting of a first network service provider connection from a set of
- 7 network service provider connections connecting the source network site to the
- 8 network,--
- 10 -----selecting of a second network service provider connection from a set of
- 11 network service provider connections connecting the destination network site to the
- 12 network,--
- 14 in which method said selections are performed at the source network site,--
- 16 and which selections are made at least in part on the basis of at least--

18 ~~-----a round-trip time value for each combination of source and destination~~
19 ~~network service provider connections, and~~

21 ~~-----a packet success rate value for each combination of source and destination~~
22 ~~network service provider connections.~~

1 2. [cancelled] A method according to claim 1, wherein said selections are
2 performed at least in part also on the time elapsed after the selection of routes was
3 previously changed.

1 3. [cancelled] A method according to claim 2, wherein the amount change in
2 the packet success rate and/or round trip time of a connection required to cause a
3 change in the route selection reduces as a function of time.

1 4. [cancelled] A method according to claim 3, wherein said function of time is
2 a piecewise linear function.

1 5. [cancelled] Network node for transmitting data packets from from a source
2 network site to a destination network site, said network sites being connected to a
3 network each via a plurality of network service provider connections, said network
4 node comprising at least

5
6 -- means for selecting of a first network service provider connection from a set of
7 network service provider connections connecting the source network site to the
8 network, and
9

10 ~~--means for selecting of a second network service provider connection from a set of~~
11 ~~network service provider connections connecting the destination network site to the~~
12 ~~network,~~
13
14 ~~which selections being made at least in part on the basis of at least~~
15
16 ~~--a round-trip time value for each combination of source and destination network~~
17 ~~service provider connections, and~~
18
19 ~~--a packet success rate value for each combination of source and destination~~
20 ~~network service provider connections.~~

1 6. [cancelled] ~~Computer software product for a system for transmitting data~~
2 ~~packets from a source network site to a destination network site, said network sites~~
3 ~~being connected to a network each via a plurality of network service provider~~
4 ~~connections, said computer software product comprising at least~~
5
6 ~~--computer software code means for selecting of a first network service provider~~
7 ~~connection from a set of network service provider connections connecting the~~
8 ~~source network site to the network, and~~
9
10 ~~--computer software code means for selecting of a second network service provider~~
11 ~~connection from a set of network service provider connections connecting the~~
12 ~~destination network site to the network,~~
13

14 ~~which selections being made at least in part on the basis of at least~~
15
16 ~~--a round trip time value for each combination of source and destination network~~
17 ~~service provider connections, and~~
18
19 ~~--a packet success rate value for each combination of source and destination~~
20 ~~network service provider connections.~~

1 7. [new] A method for selection of a route for transmission of data packets
2 from a source network site to a destination network site, said method comprising at
3 least steps of:
4 - providing a source network site with a first plurality of network service
5 provider connections connecting said source network site to a network;
6 - providing a destination network site with a second plurality of network
7 service provider connections connecting the destination network site to said
8 network;
9 - determining, at the source network site, at least one of a round trip time
10 value and a packet success rate value for each combination of individual source and
11 destination network service provider connections configurable among the first and
12 second plurality network service provider connections;
13 - selecting, at the source network site, a route comprised of a first network
14 service provider connection among said first plurality of network service provider
15 connections and a second network service provider connection among said second
16 plurality of network service provider connections, said selection of a route made on
17 the basis of at least one of said factors of said round trip time value determined at

18 said source network site for each route combination of source and destination
19 network service provider connections, and/or said packet success rate value
20 determined at said source network site for each combination of source and
21 destination network service provider connections.

1 8. [new] A method according to claim 7, wherein said step of selecting a
2 route is performed at least in part based also upon the time elapsed after said
3 selection of a route was previously changed.

1 9. [new] A method according to claim 8, wherein an amount of change in the
2 packet success rate and/or round trip time of a connection required to cause a
3 change in the route selection reduces as a function of time.

1 10. [new] A method for selection of a route for transmission of data packets
2 from a source network site to a destination network site, said method comprising at
3 least steps of:

4 - providing the source network site with a first plurality of network service
5 provider connections connecting the source network site to a network;

6 - providing the destination network site with a second plurality of network
7 service provider connections connecting the destination network site to said
8 network;

9 - determining, at the source network site, at least one of a round trip time
10 value and a packet success rate value for each combination of individual source and
11 destination network service provider connections which are configurable among said
12 first and second plurality of network service provider connections;

13 - selecting, at the source network site, a first network service provider
14 connection among said first plurality of network service provider connections and a
15 second network service provider connection among said second plurality of network
16 service provider connections on the basis of at least one of said round trip time value
17 determined at said source network site for each said combination of source and
18 destination network service provider connections, and/or said packet success rate
19 value determined at said source network site for each combination of source and
20 destination network service provider connections;

21 - reducing, as a function of time, an amount of change in the packet success
22 rate and/or round trip time of a connection required to cause a change in the route
23 selection, said function of time being a piecewise linear function.

1 11. [new] Network node for transmitting data packets from a source network
2 site to a destination network site, said source network site being connected to a
3 network via a first plurality of network service provider connections and the
4 destination network site being connected to a network via a second plurality of
5 network service provider connections, said network node comprising at least:

6 - means for determining, at the source network site, at least one of a round
7 trip time value and a packet success rate value for each combination of individual
8 source and destination network service provider connections which are configurable
9 among the first and second plurality of network service provider connections;

10 - means for selecting a first network service provider connection among said
11 first plurality of network service provider connections connecting said source
12 network site to said network on the basis of at least one of a plurality of factors
13 including the determined round trip time value for each combination of source and

14 destination network service provider connections, and the determined packet
15 success rate value for each combination of source and destination network service
16 provider connections; and

17 - means for selecting a second network service provider connection among
18 said second plurality of network service provider connections connecting the
19 destination network site to the network on the basis of at least one of a plurality of
20 factors including said determined round trip time value for each route comprised of a
21 combination of source and destination network service provider connections, and/or
22 said determined packet success rate value for each combination of source and
23 destination network service provider connections.

1 12. [new] Computer software product for a system for transmitting data
2 packets among a source network site to a destination network site, said source
3 network site being connected to a network via a first plurality of network service
4 provider connections and the destination network site being connected to a network
5 via a second plurality of network service provider connections, said computer
6 software product comprising at least:

7 - computer software code means for determining at least one of a round trip
8 time value and/or a packet success rate value for each potential route comprised of a
9 combination of individual source and destination network service provider
10 connections which is configurable among the first and second plurality of network
11 service provider connections;

12 - computer software code means for selection of a first network service
13 provider connection among said first plurality of network service provider
14 connections connecting said source network site to said network on the basis of at

15 least one of said determined round trip time value for each route comprised of a
16 combination of source and destination network service provider connections, and/or
17 the determined packet success rate value for each route comprised of a combination
18 of source and destination network service provider connections; and

19 - computer software code means for selecting a second network service
20 provider connection among said second plurality of network service provider
21 connections connecting the destination network site to the network on the basis of at
22 least one of said determined round trip time value for each route comprised of a
23 combination of source and destination network service provider connections, and/or
24 said determined packet success rate value for each combination of source and
25 destination network service provider connections.

1 13. [new] A virtual private network (VPN) gateway node for transmitting data
2 packets over VPN connections from a source network site to a destination network
3 site, wherein
4

5 said source network site is connected to a network each via a first plurality of
6 network service provider connections and the destination network site is connected
7 to a network via a second plurality of network service provider connections;
8

9 and wherein said VPN gateway node comprised at least:

10
11 - means for determining at least one of a round trip time value and a packet success
12 rate value for each route comprised of a combination of individual source and
13 destination network service provider connections which are configurable among said

14 first and second plurality network service provider connections;

15
16 - means for selecting, for a VPN connection, a first network service provider
17 connection among said first plurality of network service provider connections
18 connecting the source network site to the network on the basis of at least one of
19 said determined round trip time value for each route comprised of a combination of
20 source and destination network service provider connections, and/or said determined
21 packet success rate value for each route comprised of a combination of source and
22 destination network service provider connections; and

23
24 - means for selecting, for said VPN connection, a second network service provider
25 connection among said second plurality of network service provider connections
26 connecting said destination network site to said network on the basis of at least one
27 of said determined round trip time value for each route comprised of a combination of
28 source and destination network service provider connections, and/or said determined
29 packet success rate value for each combination of source and destination network
30 service provider connections.

1 14. [new] A cluster of virtual private network (VPN) gateway nodes at a
2 source network site for transmitting data packets over VPN connections to a
3 destination network site, wherein

4
5 each of said VPN gateway nodes in said cluster at said source network site being
6 connected to a network via a first plurality of network service provider connections;

8 and wherein said destination network site being connected to said network via a
9 second plurality of network service provider connections,

10
11 and wherein each of said VPN gateway nodes in said cluster comprises at least:

12
13 - means for determining at least one of a round trip time value and/or a packet
14 success rate value for each route comprising a combination of individual source and
15 destination network service provider connections which are configurable among the
16 first and second plurality network service provider connections;

17
18 - means for selecting, for a VPN connection, a first network service provider
19 connection among said first plurality of network service provider connections
20 connecting the source network site to said network on the basis of at least one of
21 said determined round trip time value for each route combination of source and
22 destination network service provider connections, and/or the determined packet
23 success rate value for each combination of source and destination network service
24 provider connections; and

25
26 - means for selecting, for said VPN connection, a second network service provider
27 connection among said second plurality of network service provider connections
28 connecting the destination network site to said network on the basis of at least one
29 of said determined round trip time value for each combination of source and
30 destination network service provider connections, and/or said determined packet
31 success rate value for each combination of source and destination network service
32 provider connections.